

# Optional Shaker Motor Installation Instructions

## Kit Contents:

1. Shaker Motor Assembly with Harness Ref. Decal (1) (515-5893-01 + 820-6407-SM2) + Securing hardware: #8-32 T-Nut (4) (240-5101-00 and #8-32 X 5/8" SHWH Screw (4) (237-5975-03).
2. Cover with Warning Decal (1) 545-5241-00 + 820-6062-00) + Securing Hardware: #8-32 X 3/8" SHWH Screw (2) (237-5967-00).
3. Shaker Motor PC Board with Spacers (1) (520-6803-00 + 254-5007-01) Securing Hardware: #6 X 3/4" SHWH Screw (4) (234-5003-00).
4. Shaker Motor BRN-GRY & RED-WHT wiring harness (036-5537-00) + 5- 1/2" Cable Tie (4) (040-5002-02).
5. Shaker Motor Ground Tap harness. (036-5602-01).
6. This Instruction Sheet (756-5027-02).
7. Installation Template (756-5027-00T).

## Tools Required:

Drill + 7/32" Drill Bit, 1/4" Nut Driver or Flat Head Screw Driver, Hammer and Scissors.

## Procedure:

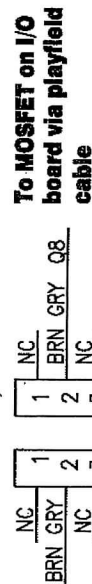
Ensure Power is Off While Performing any Task. **Note:** Depending on when your game was manufactured, steps 1-3 may have already been performed at the factory.

1. Cut out item (6) Template included in kit. Lay template in front left cabinet (left side of cash box). Reference A & B to align template to these edges.
2. Drill four (4) 7/32" thru holes as shown using the cut-out template as a guide.
3. Tap in the four (4) #8-32 T-Nuts (included) with a hammer from under the cabinet.
4. Place item (1). Shaker Motor Assembly in cabinet and align with holes drilled in step 2. Apply Loctite #243 (not included) to the four (4) #8-32 X 5/8" Screws (included) and hand start while holding the T-Nuts from below to keep from getting pushed out. Once tightened, the T-Nuts will draw tighter into the cabinet.
5. Install item (3) Shaker Motor Board (SM PCB) with four (4) #6 X 3/4" screws to the side of the cabinet.
6. Plug in the 5-Pin connector from the Shaker Motor into the SM PCB (J2).
7. Install item (4) Shaker Motor BRN-WHT & RED-WHT wiring harness. Plug in the 7-Pin connector from the harness into the SM PCB (J1). Plug in the 2-Pin female connector with the (red/white) wire into the 2-Pin male connector located in the front left side of the cabinet. Plug in the 3-Pin female connector with the (brown/gray) wire into the 3-Pin male connector located in the back of the cabinet.
8. Install item (5) Ground Tap harness. Locate and unplug connector (J16) on the I/O board located in the backbox. Plug the **Black** connector from the harness to the (J16) connector on the I/O board. Plug the **White** connector from the harness to the connector that was previously removed from the (J16) connector. Route the 2-Pin connector from the harness down from the backbox into the cabinet and up to the SM PCB. Plug in the 2-Pin connector from the harness into SM PCB (J3).
9. Attach item (2) Cover to the shaker motor assembly with (2) #8-32 X 3/8" screws (included).

## 756-5027-02

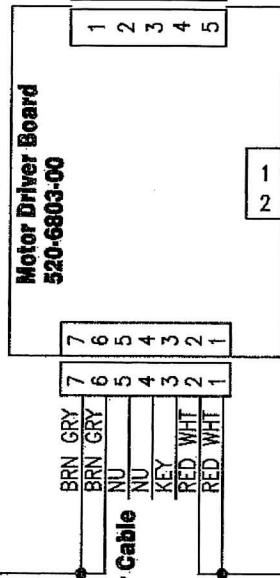
## SHAKER MOTOR KIT 502-5027-00

This connector is off of the playfield cable and hanging loose in the cabinet bottom. Plug this into the 036-5537-00 kit cable.



Note games prior to 2004 may use a different MOSFET drive. Thus the BRN GRY wire color will be different.

**Motor Driver Board Assy  
(with snap mount spacers)  
515-5742-00**

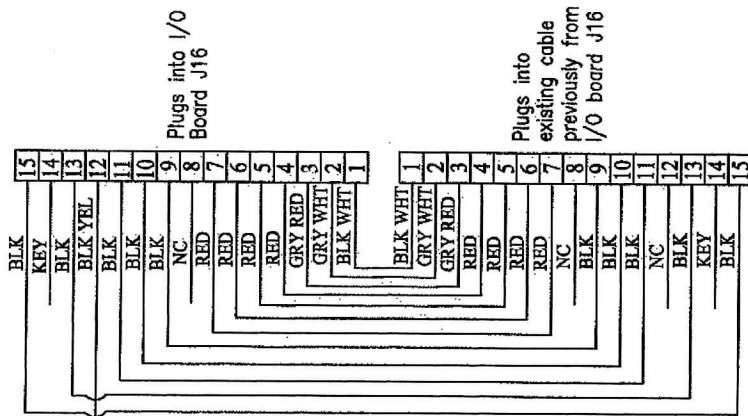


**Shaker Motor Cable  
036-5537-00**

**Ground Tap Cable  
036-5602-01**



This connector is off of the cabinet AC cable located near the coin door on the left side, plug this into the 036-5537-00 kit cable



**Shaker Motor & Mounting Assy  
with cable (036-5123-00)  
515-5893-01**



$V_{dc} = V_{rms} \sqrt{2}$

**+14.6V DC**

TITLE

DATE  
March 12, 2014

DWN. Reyna

1st USE p1  
----- 1:1 C

SHAKER MOTOR KIT WIRING

**Stern Pinball, Inc**

2020 JANICE AVE., MELROSE PARK, IL 60160

PART NO.

**502-5027-00**

# Optional Shaker Motor Installation Template

for Optional Shaker Motor Kit 502-5027-00-84

